

ABSTRACT

To provide an electroless copper plating solution that is favorable to improve the adhesion of a plating film, and an electroless copper plating solution which realizes uniform plating at a low temperature. This electroless copper plating solution is characterized by containing a water-soluble nitrogen-containing polymer in an electroless copper plating solution, and preferably the above-mentioned electroless copper plating solution contains glyoxylic acid and phosphinic acid as reducing agents. The water-soluble nitrogen-containing polymer is preferably a polyacrylamide or a polyethyleneimine, and preferably its weight average molecular weight (Mw) is at least 100,000, and Mw/Mn is 10.0 or less.